Application No.: 09/911,039 Docket No.: POLYPROBE 3.0-017 CIP CONT CONT

IN THE CLAIMS

Claims 1-25 (Canceled)

- 26. (previously presented): An oligonucleotide comprising a nucleotide sequence complementary to a primer, and a nucleotide repeat region downstream from said complementary sequence, wherein said nucleotide repeat region comprises at least one detectably labeled nucleotide, each of said at least one detectably labeled nucleotide containing the same detectable label, and wherein said nucleotide repeat region also comprises a plurality of nucleotides that are not detectably labeled.
- 27. (previously presented): The oligonucleotide of claim 26, wherein said detectable label comprises a fluorescent dye.
- 28. (previously presented): The oligonucleotide of claim 26, wherein said detectable label comprises a radiolabel.
- 29. (previously presented): The oligonucleotide of claim 28 , wherein said radiolabel is 32 P.
- 30. (previously presented): The oligonucleotide of claim 26, which is single-stranded.
- 31. (previously presented): The oligonucleotide of claim 26, which is double-stranded.
- 32. (previously presented): The oligonucleotide of claim 26, which contains from about 20 to about 1000 total nucleotides.
- 33. (currently amended): An optimally labeled oligonucleotide, comprising a detectably labeled nucleic acid sequence and a nucleotide repeat region, wherein the nucleotide repeat region comprises at least one nucleotide that is conjugated to a detectable label, and a plurality of nucleotides that are not conjugated to a detectable label, wherein each of said at least one detectably labeled nucleotides nucleotide contains the same detectable label.

Application No.: 09/911,039

Docket No.: POLYPROBE 3.0-017 CIP CONT CONT

- 34. (previously presented): The oligonucleotide of claim 33, wherein said detectable label comprises a radiolabel.
- 35. (previously presented): The oligonucleotide of claim 34, wherein said radiolabel is ^{32}P .
- 36. (previously presented): The oligonucleotide of claim 33, which is single-stranded.
- 37. (previously presented): The oligonucleotide of claim 33, which is double-stranded.
- 38. (previously presented): The oligonucleotide of claim 33, which contains from about 20 to about 1000 total nucleotides.
- 39. (new): The oligonucleotide of claim 33, wherein the detectable label comprises a fluorescent dye.
- 40. (new): The oligonucleotide of claim 33, wherein the detectable label comprises biotin.
- 41. (new): The oligonucleotide of claim 33, wherein the detectable label comprises digoxigenin.
- 42. (new): The oligonucleotide of claim 33, wherein the detectable label comprises an antibody.
- 43. (new): The oligonucleotide of claim 33, wherein the detectable label comprises an enzyme.
- 44. (new): The oligonucleotide of claim 33, wherein the detectable label comprises a receptor.
- 45. (new): The oligonucleotide of claim 33, wherein the detectable label comprises streptavidin.
- 46. (new): The oligonucleotide of claim 33, wherein the detectable label comprises avidin.